annealing the solder contact to form a solder ball contact having a diameter in a range of about 2.5 microns to no greater than 100 microns.

3.(Amended) The method of claim 1, wherein depositing solder further comprises depositing at least one material selected from [the] a group consisting of lead, tin and bismuth.

9.(Amended) A method of forming a solder ball contact, comprising:

forming a metal contact pad on a substrate;

forming an insulating layer on the metal contact pad;

removing a portion of the insulating layer to expose a portion of the metal contact pad, thereby forming an exposed portion of the metal contact pad;

[immersing the substrate in molten solder;]

depositing solder on the exposed portion of the metal contact pad, thereby forming a solder contact by selectively depositing solder only on the exposed portion of the metal contact and not depositing solder on the insulating layer;

maintaining remaining portions of the insulating layer surrounding the solder; and

annealing the solder contact to form a solder ball contact having a diameter in a range of about 2.5 microns to no greater than 100 microns.

10.(Amended) The method of claim 9, wherein [immersing the substrate in molten] depositing solder comprises [immersing the substrate in molten solder having] depositing at least one material selected from [the] a group consisting of lead, tin and bismuth.

11.(Amended) A method of forming a solder ball contact, comprising:

forming a metal contact pad on a substrate;

forming an insulating layer on the metal contact pad;

removing a portion of the insulating layer to expose a portion of the metal contact pad, thereby forming an exposed portion of the metal contact pad, wherein the exposed portion of the metal contact pad has a diameter of approximately 2 microns;

[immersing the substrate in molten lead;]

selectively depositing lead on the exposed portion of the metal contact pad, thereby forming a solder contact in which solder is selectively deposited only on the exposed portion of the metal contact and not on the insulating layer; and

annealing the solder contact to form a solder ball contact without removing remaining portions of the insulating layer .

71.(Amended) A method of forming a solder ball contact, consisting essentially of:

forming a metal contact pad on a substrate;

forming an insulating layer on the metal contact pad;

removing a portion of the insulating layer to expose a portion of the metal contact pad, thereby forming an exposed portion of the metal contact pad, the exposed portion having a predetermined diameter;

[immersing the substrate in molten solder;]

depositing solder on the exposed portion of the metal contact pad using selective deposition, thereby forming a solder contact; and

annealing the solder contact to form a solder ball contact having a diameter in a range of about 2.5 microns to no greater than 100 microns.

REMARKS

Applicant has reviewed and considered the Office Action mailed on February 13, 2002, and the references cited therewith.

Claims 1, 3, 9-11, and 71 are amended, as a result, claims 1, 3-12, 64, 65, 68, and 71 are now pending in this application.